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2014

Designing Healthier Houses in Guatemala

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Recommended Citation

Prescott, Mary; Ross, Jonathan; Torres, Alessandra; and Trahan, Meghan, "Designing Healthier Houses in Guatemala" (2014). *Great Problems Seminar Posters*. Book 165.

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Abstract

Background

Particulate matter levels in this region reach more than 100 times accepted levels (Von Ritter Figueres, 2010). The inhalation of these harmful emissions leads to high disease rates in rural areas.

Problem Statement



Studies

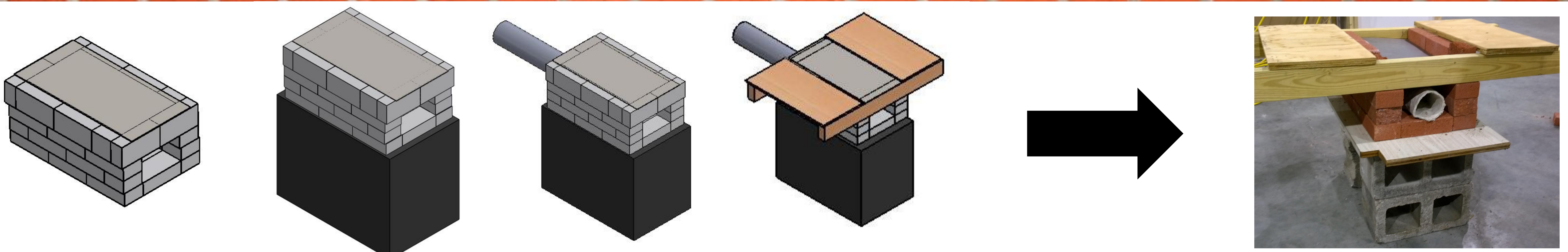
- RESPIRE Study on Respiratory Symptoms:**
Open Fire vs. Modified Stove



The 4-Step Stove - La Estufa de Cuatro Pasos

- efficient wood-burning
- elevation
- ventilation
- table/workspace
- optional modifications
 - fire bricks for warmth
- easy to build/repair
- build-on/upgradable approach (levels)
 - price increases with level

Level	Provides	Total Price (Quetzals)	Total Price (USD)
1	Efficient Wood Burning	Q 177.80	\$22.99
2	Elevation	Q 188.51	\$24.37
3	Ventilation	Q 265.91	\$34.37
4	Table/Workspace	Q 381.62	\$49.33



References

Acknowledgments

Thank you professor Creighton R. Peet and Ashley Emerson Gilbert of Seven Hills Global Outreach for the fantastic interviews, from which we gleaned social knowledge on Guatemala. Thank you to our professors for all of the guidance and organization. Finally, thank you Thomas Mills Washburn for the help and resources provided.